In the Alban Berg Nachlass

Analyses of Arnold Schönberg's Early Twelve-Tone Works*

In a letter to Arnold Schönberg dated September 1925, Alban Berg wrote that he was studying Schönberg's early twelve-tone works:

Casting a glance into your new score [the Wind Quintet, op. 26] a while back was immeasurably exciting. How long will it be before I understand this music <u>as</u>thoroughly as I fancy, for example, that I understand Pierrot. For the present I am slowly familiarizing myself with your Opera 23–26, the only scores I have up here with me.¹

Whereas it is clear from Berg's letter that he possessed his own scores of Schönberg's earliest twelve-tone works, he does not provide any details about the results of his studies nor does he offer any of his analytical insights. I believe that the Schönberg scores Berg was scrutinizing are housed in the Alban Berg Nachlass, and for this essay I am especially interested in Berg's analyses of the three earliest twelve-tone compositions by Schönberg: the *Five Piano Pieces*, op. 23; the *Serenade*, op. 24; and the *Suite for Piano*, op. 25.²

I find Berg's analytical observations to be insightful, especially considering that these analyses were most likely written in the mid 1920s when Schönberg had already completed his early twelve-tone works and was continuing to refine his method. Although several essays describing Schönberg's "composition with twelve tones related only to one another" appeared in print in 1924 and 1925, there were no analytical models or standard ways to analyze Schönberg's new works.³ To complicate matters even further, Schönberg

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- 1 Alban Berg to Arnold Schönberg, September 1925 (Arnold Schönberg Center, Wien [T79.04] | ASCC ID 20858); published in *The Berg-Schoenberg Correspondence:* Selected Letters. Edited by Juliane Brand, Christopher Hailey, and Donald Harris (New York, London 1987), 338.
- 2 Opera 23 and 25 are located in folder F21.Berg.169 and op. 24 in F21.Berg.170. Both folders are housed in the Austrian National Library in Vienna.
- 3 The first public introduction of Schönberg's new compositional method appeared in Erwin Stein: Neue Formprinzipien, in *Musikblätter des Anbruch* 6/7–8 (August–September 1924), 286–303. A year later, Felix Greissle published his twelvetone analysis of Schönberg's *Wind Quintet*, op. 26. See Felix Greissle: Die formalen Grundlagen des Bläserquintetts von Arnold Schönberg, in *Musikblätter des Anbruch* 7/2 (February 1925), 63–68.

was reluctant to explain his twelve-tone method both in public and in his teaching.⁴ A year after his 1931 lecture on the *Variations for Orchestra*, op. 31 that was broadcast on Radio Frankfurt, Schönberg explained in a letter to Edgar Prinzhorn, dated April 17, 1932, why he has not published about his twelve-tone method:

With the exception of the 'Harmonielehre', in the field of theory I have published, up till now, only essays of a rather polemical character. For nearly twenty years I have been collecting material, ideas and sketches for an all-inclusive textbook of composition. When I shall finish it, I do not know. In any case: I have published nothing about 'composition with twelve tones related only to one other' and do not wish to do so until the principal part of my theory is ready; the 'Study of Musical Logic'. For I believe that meaningful advantage can be derived from this art of composition when it is based on knowledge and realization that comes from musical logic; and that is also the reason why I do not teach my students 'twelve-tone composition', but 'composition', in the sense of musical logic; the rest will then come, sooner or later, by itself.⁵

And in a performance review of *Ode to Napoleon Buonaparte*, op. 41 that took place on November 23, 1944 in Carnegie Hall in New York City, the author included a quote by Schönberg who briefly discussed the problem of teaching the twelve-tone method:

Schönberg the teacher is never as revolutionary as Schönberg the composer. Students are forbidden to indulge in atonalities and the like until they are well grounded in traditional classicism. And he is always frank to tell that "the introduction of my method of composing does not facilitate composing. On the contrary it makes it more difficult." ⁶

Since Schönberg was hesitant to teach his method of composing with twelve tones and the lack of resources and analytical models that one could consult in order to better understand his twelve-tone compositions, it is not surprising then that a close look at Berg's attempts to familiarize himself with Schönberg's early twelve-tone works reveal that he was sometimes successful and sometimes not. On the one hand, most of the analytical remarks demonstrate a solid understanding of Schönberg's new twelve-tone method.⁷ On the other

- 4 For an overview of the origins and dissemination of Schönberg's method of composing with twelve tones from 1921–1924, see Therese Muxeneder: Arnold Schönbergs Verkündung der Zwölftonmethode, in Arnold Schönbergs Schachzüge | Brilliant Moves. Dodekaphonie und Spielekonstruktionen | Dodecaphony and Game Constructions. Bericht zum Symposium | Report of the Symposium 3.–5. Juni 2004. Edited by Christian Meyer (Wien 2006), 301–313 (Journal of the Arnold Schönberg Center 7/2005).
- 5 Arnold Schönberg to Edgar Prinzhorn, April 17, 1932 (carbon copy; The Library of Congress, Washington, D.C., Music Division [Arnold Schoenberg Collection] | ASCC ID 2165); published and translated in Josef Rufer: The Works of Arnold Schoenberg: A Catalogue of His Compositions, Writings and Paintings (London 1962), 140.
- 6 Anonymous: Twelve-Tone Puzzle, in *Newsweek* (December 4, 1944), 91 (Arnold Schönberg Center, Wien [Clippings 1944]).
- 7 Although Grünzweig discusses Berg's twelve-tone analyses, I focus on other analytical details in this essay. See Werner Grünzweig: Ahnung und Wissen, Geist und Form. Alban Berg als Musikschriftsteller und Analytiker der Musik Arnold Schönbergs (Wien 2000), 285–292 (Alban Berg Studien 5). For additional remarks on Berg's twelve-tone analyses in the Alban Berg Nachlass, see Rosemary Hilmar: Die Werke von Alban Berg: Handschriftenkatalog (Wien 1981) (Alban Berg Studien 1).

hand, some of Berg's annotations appear to be analytical sketches, preliminary attempts to familiarize himself with the twelve-tone works.

The analyses of Schönberg's early twelve-tone works in the Alban Berg Nachlass consist of twelve-tone row charts with all forty-eight forms of the row and handwritten annotations, remarks, and twelve-note counting in pencil and colored pencils on both the scores and sheets of manuscript paper. While examining Berg's analyses, I concluded that his student, Julius Schloß, was involved with some of these analyses. The analytical annotations and remarks in both Berg's and Schloß's hands suggest that they collaborated to better understand Schönberg's new method of composing with twelve tones.

Row Charts

The Alban Berg Nachlass houses three row charts for Opera 23–25, and the layout for all three is the same. Plate 1 reproduces the row chart that was constructed for Schönberg's *Suite for Piano*, op. 25. The prime row is notated on the top, left-hand side of the chart and is labeled O[riginal]. Its inversional partner is given to the right on the same staff and labeled U[mkehrung]. Arabic numbers from 1 to 12 are written along the top of the chart for both O and U and refer to the order of the pitches. Transpositions are listed below O and U and labeled with Roman numerals from I to XII in both the left- and right-hand margins. Reading from top to bottom the transpositions chromatically ascend. Reading any row from right to left generates the retrograde and retrograde inverted forms. Thus, all forty-eight forms of a row are represented in this chart. All of the notes are written in black ink with solid noteheads and stems. In addition, two curvy lines were drawn, one in the middle and the other on the right-hand side of the table

- 8 Julius Schloß (1902-1972) was Berg's pupil from 1925-1928. Although the lessons ended in 1928 Schloß maintained a close personal relationship with Berg in the years that followed. According to Schloß, his lessons with Berg consisted of studies in harmony, form, and counterpoint, but Schloß does not mention twelve-tone instruction. The Schloß Nachlass is housed in the Julius Schloss Collection, Marvin Duchow Music Library, Schulich School of Music, McGill University, Montréal, Canada. The Schloß-Berg correspondence is located in the Austrian National Library in Vienna and the Bayerische Staatsbibliothek in Munich. The letters from Berg to Schloß have been transcribed and discussed by Birgit Fälschle: Alban Berg: Briefe an Julius Schloß (München 1989).
- 9 The tables for Opera 23–25 were written on half sheets of manuscript paper. On the back of the op. 25 row chart is the trademark "J.E.& Co." (cut on the margins). The trademark for the op. 24 chart is "J.E.&Co. Protokoll Schutzmarke", and the size is "N.º 8a | 26 linig."
- 10 The row chart that was constructed for op. 23, no. 5 does not include Romannumeral labels.
- 11 The layout of Berg's row charts that he constructed for his own compositions are similar to the row tables for Opera 23–25. However, when reading Berg's charts from top to bottom the transpositions descend. For an essay on the structure of row charts by Berg, Schönberg, Webern, and Spinner,

see Regina Busch: Einige Bemerkungen zur Zwölftonkomposition bei Schönberg, Berg und Webern, in Bericht über den 3. Kongreß der Internationalen Schönberg-Gesellschaft. »Arnold Schönberg – Neuerer der Musik«. Duisburg, 24. bis 27. Februar 1993. Edited by Rudolf Stephan and Sigrid Wiesmann (Wien 1996), 114–136 (Publikationen der Internationalen Schönberg-Gesellschaft 3). For a discussion of Schönberg's row charts, see Joseph Auner: Schoenberg's row tables: temporality and the idea, in The Cambridge Companion to Schoenberg. Edited by Jennifer Shaw and Joseph Auner (Cambridge etc. 2010), 157–176.

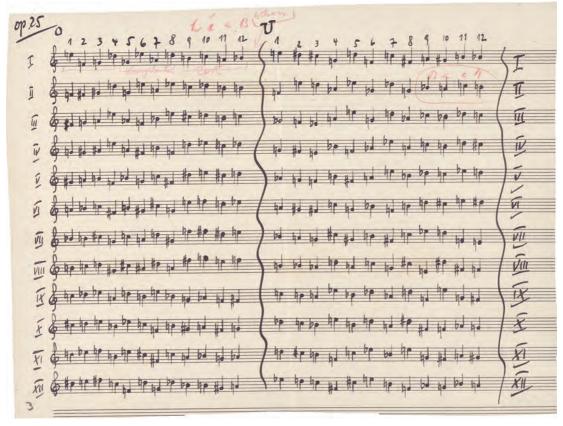


Plate 1: Julius Schloß: Twelve-tone row chart for Arnold Schönberg's *Suite for Piano*, op. 25 (Österreichische Nationalbibliothek, Wien, Musiksammlung [F21.Berq.169])

While I believe Schloß was responsible for carefully and methodically writing out this row chart, including the tables for the *Serenade* and the *Five Piano Pieces*, Berg added a few annotations to the op. 25 chart in red pencil. Above the last four pitches of the original row Berg wrote "h c a B," pointing out that the BACH motive appears in retrograde. He then wrote "4 chrom" to indicate that these last four notes form a chromatic collection. Berg also drew brackets below the pitches of OI, partitioning it into three tetrachords. The middle

tetrachord is labeled "Komplementär" and the last partition as "Rest." ¹³ In addition, Berg circles and labels the B-A-C-H motive that appears in UII.

I believe that the tables for Opera 23–25 served two purposes. Perhaps the most obvious reason was to aid in the analysis of Schönberg's twelve-tone works. Once a chart was constructed, it could easily facilitate the labeling and counting of the twelve-tone rows in a piece. Since Schönberg used multiple row statements in his Suite for Piano, a chart that displays all forty-eight forms would easily and guickly help identify the various rows that Schönberg employed.¹⁴ However, in the fifth movement of the Five Piano Pieces and the fourth movement of the Serenade, Schönberg used only the original row. Why then would Schloß create tables that display all forty-eight forms of the row for these two works? Perhaps Schloß was not aware that Schönberg employed a limited number of rows and began his twelve-tone analyses by first constructing row charts. I also suggest that Schloß constructed the row charts for Opera 23 and 24 in order to practice writing out this kind of table. Whereas the op. 25 chart (Plate 1) was meticulously drawn without any mistakes, there were several pitch and notation mistakes on the row charts for Opera 23 and 24 that were corrected. Since there were no published row charts to serve as a model, I believe Schloß wrote them out to gain practical experience. Berg must have trusted his student's ability to make these kinds of tables since he asked Schloß to complete one of his row charts for Lulu.15

Annotated Scores

I thus argue that the three row charts for Schönberg's early twelve-tone works were not only constructed for analytical purposes, but also gave Schloß some experience writing out these kinds of tables. In the Alban Berg Nachlass, these row charts accompany Schönberg's scores, presumably the ones that Berg was studying. Throughout these scores are numerous handwritten annotations

- 13 Both "Komplementär" and "Rest" not only appear in Berg's handwritten notes for Schönberg's Suite for Piano, op. 25 (Österreichische Nationalbibliothek, Wien, Musiksammlung [F21.Berg.107/I]), but also appear in the typed document "Komposition mit zwölf Tönen" ("KzT"). Grünzweig provides a transcription of F21.Berg.107/I. See Werner Grünzweig: Ahnung und Wissen, Geist und Form, see fn. 7, 285–292. See "Komposition mit zwölf Tönen" (Österreichische Nationalbibliothek, Wien, Musiksammlung [F21.Berg.121]). "KzT" has received a great deal of attention by numerous scholars. For
- an excellent summary of these discussions, see Martin Eybl: Frühe Dokumente zur Entstehung der Zwölftonkomposition aus dem Nachlass Alban Bergs: Philologische Beobachtungen, in Arbeit an Musik: Reinhard Kapp zum 70. Geburtstag. Edited by Markus Grassl, Stefan Jena and Andreas Vejvar (Wien 2017), 239–267.
- 14 Schönberg restricted his choice of row forms in op. 25 to only eight: all four versions of both the original row (OI, UI, KI, and KUI) and its tritone transposition (OVII, UVII, KVII, and KUVII).
- 15 Schloß was asked to complete the twelve-tone table for the Geschwitz row from *Lulu*. On folio 2' Berg wrote the first note for rows I to XII and wrote out row IV in its entirety. The rest appears to be in Schloß's hand. (Österreichische Nationalbibliothek, Wien, Musiksammlung [F21.Berg.28/XXI, folio 2' and 3]).
- 16 Opera 23 and 25 are bound together with *Pierrot lunaire* and Eduard Steuermann's piano arrangement of Schönberg's *Chamber Symphony*, op. 9. On the title page of the *Chamber Symphony* Schönberg wrote

entered in pencil and colored pencils. The remarks pertain to form, rhythm, motivic structures, and twelve-tone counting. For the most part the twelvetone analyses are straightforward and consist of the labeling and counting of rows. For example, on the first movement of Schönberg's Suite for Piano, row statements are identified with Roman numerals (e.g., OI and KVII) and Arabic numbers to identify the order of the notes in a row statement. At the top of the first page of the Suite Berg wrote in red pencil: "1. reines Reihen Werk" [first pure row work] and "mit 1 Reihe" [with 1 row]. 17 A basic twelve-tone count of the beginning and ending of Schönberg's "Sonett" was entered onto the score in colored pencils, and at the top of the first page of the "Sonett" Schloß wrote handwritten comments on the free treatment of the Sonett's twelve-tone row in the accompanying parts. ¹⁸ On the score of op. 23, no. 5 (the "Walzer"), the notes of each twelve-tone row statement are labeled with Roman and Arabic numerals in pencil and colored pencils. Berg transcribed the first five notes of the piece's row at the top, left-hand side of the first page of the score and the remaining seven pitches on the top, right-hand side. Schloß wrote a brief description of the Waltz at the top of the first page of the score, noting that the entire movement is based on a single row that is continuously presented, without interruptions or transpositions, until m. 104.¹⁹

While most of these twelve-tone analyses involve note counting, there are two analytical markings on these scores that reveal other technical aspects of Schönberg's new compositional method. When notes of a row statement appear out of order an exclamation point was sometimes entered onto the score. For example, in m. 42 from the fifth movement of the *Five Piano Pieces*, the tenth note of the original row is presented before the ninth note. On Berg's copy of the score, this moment is labeled with an exclamation point in orange pencil, and below this punctation mark is the comment "10 vor 9" [10 before 9] written in pencil.²⁰ There seems to be, however, a lack of consistency with this analytical remark. Not every instance of notes out of order is marked with an exclamation point. In the last two measures of the "Gavotte" from the *Suite*, the original row is stated in its entirety and is analyzed with Arabic numbers in

a Christmas dedication to Berg: "Lieber Berg. | Herzlichste Weihnachtswünsche | Dein Arnold Schönberg | 1923." (Österreichische Nationalbibliothek, Wien, Musiksammlung [F21.Berg.169]). The Serenade, op. 24 is bound together with the Second String Quartet, op. 10 and the Wind Quintet, op. 26 (Österreichische Nationalbibliothek, Wien, Musiksammlung [F21.Berg.170]).

¹⁷ Berg underlined "Werk" three times and "1" four times.

¹⁸ In pencil at the top of page 29 of the Serenade, Schloß wrote: "Sehr freie Reihenbehandlung in den Begleitstimmen; | viele Tonwiederholungen (keine 'erlaubten'!) + Tonumstellungen!" [Very free row treatment in the accompanying parts; many note repetitions (no "allowed" ones!) and note changes!].

¹⁹ In pencil at the top of page 16 of op. 23, no. 5, Schloß wrote: "bis Takt 104 ununter-brochen nur Originalreihe, | <u>un</u>transponiert! |

von 104 hier auch 3 x der | Krebs." [Until measure 104 only the original row uninterrupted and <u>not</u> transposed! from (measure) 104 here also the retrograde 3 times.].

²⁰ Exclamation marks appear on all three scores: op. 23, no. 5 in mm. 42, 43, 76, and 104; op. 24 "Sonett" in mm. 6 and 86; op. 25 "Präludium" in mm. 9, 10, 11, 13, and 15; op. 25 "Gavotte" in m. 9; op. 25 "Musette" in mm. 2 and 7; and op. 25 "Gigue" in m. 74.



Plate 2: Julius Schloß: Analysis of mm. 1–2 from the "Gavotte" of Arnold Schönberg's Suite for Piano, op. 25 (Österreichische Nationalbibliothek, Wien, Musiksammlung [F21.Berg.169])

red pencil. In this statement of OI pitches 3 and 4 are articulated before 1 and 2 as well as 5 and 6 before 7 and 8. Yet no exclamation was drawn onto the score. Another analytical marking that goes beyond simply counting the twelve notes of a row is "W⁻⁻⁻" which indicates Wiederholung or repetition (Plate 2). In mm. 1–2 in the "Gavotte" from Schönberg's *Suite*, the original row is presented by the right and left hands (1–8 in RH, 9–12 in LH). At the end of m. 1 and into m. 2 pitches 9, 10, 11 (B, C, A) that were just presented are articulated once again but in retrograde 11, 10, 9 (A, C, B). A "W⁻⁻⁻" was written in orange pencil above this note-group repetition with the bracket extending above all three notes. In addition, Schloß wrote "(*im Krebs!*)" [(in retrograde!)] in orange pencil. Schloß's marking thus highlights the repetition of a group of notes that was already presented by a complete statement of the row.²¹

Berg's chart of Schönberg's "Sonett"

In addition to the analyzed scores and the accompanying row charts, the Alban Berg Nachlass houses a diagram that Berg constructed of Schönberg's "Sonett," the fourth and only twelve-tone movement in the *Serenade*.²² Plate 3 reproduces Berg's analysis. The form of the "Sonett" is governed by the Petrarchan text. The text consists of fourteen lines, and each line contains eleven syllables.

in Philip Stoecker: Analyses of Arnold Schönberg's Serenade, op. 24 and Wind Quintet, op. 26 by Alban Berg and Julius Schloß, in Journal of the Arnold Schönberg Center 16/2019. Edited by Eike Feß and Therese Muxeneder. Wien 2019, 50–87.

²¹ The **W**⁻⁻; does not appear in the op. 23 analysis, but in the *Serenade* it was entered on mm. 22, 25, and 26 of the third movement, the "Variationen," which is based on a fourteen-note series. In the *Suite for Piano*, this marking appears only twice in the "Gavotte," mm. 1–2 and 3–4. A more detailed explanation of **W**⁻⁻; appears

²² Grünzweig briefly describes this chart: "4': Zahlentabellen fußend auf der Reihe des Soßerts, op. 24/4: e-d-es-h (ces)-c-des-as-ges-a-f-g-b." See Werner Grünzweig: Ahnung und Wissen, see fn. 7, 288. Berg's chart is located in the Österreichische Nationalbibliothek, Wien, Musiksammlung (F21.Berg.107/I).



Plate 3: Alban Berg's analysis of the "Sonett" from Arnold Schönberg's Serenade, op. 24 (Österreichische Nationalbibliothek, Wien, Musiksammlung [F21.Berg.107/I])

Berg captures the structure of Schönberg's "Sonett" in his diagram, located on the bottom half of the page, by showing how the structure of the text relates to the twelve-tone row, which is continuously rotated throughout the entire movement. At the top of his chart, Berg wrote the twelve-tone row of the "Sonett" with pitch letter names, and above he provides the instrument that presents the pitches of the first row statement in mm. 1–4. Above the first two pitches, E and D, Berg wrote " $vgl\ Gg$ " [compare violin], and above the next three pitches – es, h (ces), c – he remarks "BBCl" [bass clarinet], and so on. Along the right-hand column Berg lists numbers from 1 to 14, which refer to the fourteen lines of the Sonett's text. To show the different stanzas Berg drew double lines between 4/|5, 8/|9, and 11/|12. This corresponds to Berg's remark on the top, right-hand side of the page, "Sonett | 8 | 6 | / |14."

Numbers 11 and 1 that are listed inside the chart pertain to the 11 syllables for each line of the text and how each line relates to the twelve-tone row. A "1" indicates which note of Schönberg's row is the first syllable for that particular line of the text while an "11" signals the last syllable. For example, Berg shows that the first line of the text begins on E, the first note of the twelve-tone row, and ends 11 notes later on G. Line 2 of the text begins on Bb, the last note of the twelve-tone row – marked with a "1" in the column below "b" – and ends 11 notes later on F. Berg continues in this manner until he reaches the end of the text. In the last row of his diagram at the bottom of the page he wrote the final word of the text "vernommen" in three different columns under the pitches of ges, a, and f. On his copy of the score, Berg drew a line in pencil to designate the start of each line of the text and marked the beginning of stanzas two, three, and four with a Roman numeral, e.g., "II. Str[ophe]" in m. 19 and "III Str[ophe]" in m. 40.

Analyses of Schönberg's Five Piano Pieces, op. 23, nos. 1 and 2

The analyses of the first two movements of Schönberg's *Five Piano Pieces*, op. 23 that are housed in the Alban Berg Nachlass reveal that both Berg and Schloß were not only interested in the motivic structure of these pieces, but also show that they analyzed these two movements from a twelve-tone perspective even though neither are dodecaphonic works.²³ Schloß's motivic and twelve-tone analyses of the first two piano pieces appear on the reverse side of the row chart that was constructed for op. 23 (Plate 4).²⁴ The annotations on the top

²³ This is a procedure followed in North American theoretical literature decades later. See Robert Morris: Modes of

²⁴ Österreichische Nationalbibliothek, Wien, Musiksammlung (F21.Berg.169).



Plate 4: Julius Schloß's analytical notes to the first and second movements of Arnold Schönberg's *Five Piano Pieces*, op. 23 (Österreichische Nationalbibliothek, Wien, Musiksammlung [F21.Berg.169])

staff pertain to the second piano piece while the remarks on the next four staves concern the first movement.

On the top staff of a half sheet of manuscript paper, Schloß transcribed the nine-note, right-hand melody from m. 1 of op. 23, no. 2; incidentally, he notated the seventh note as a B\(\beta\) instead of C\(\beta\) that is published in the score. To the right of this nine-note series, Schloß added three additional pitches (C, E, D\(\beta\)), thus generating what appears to be a twelve-tone row. Although C–E–D\(\beta\) do not appear together as a melodic unit or as a harmonic collection, I believe that Schloß extracted these pitches from the right-hand melodic line in order to generate twelve different notes. All of the pitches in m. 2 and the first two notes in m. 3 duplicate pitches from the opening nine-note melody in m. 1. However, the third note in m. 3, C\(\beta\), is the tenth different note to appear in the right hand. The next new right-hand pitch in m. 3 is E\(\beta\), and with the appearance of the grace-note D\(\beta\) in m. 4, all twelve pitches are now accounted for. I thus believe that in this analytical sketch Schloß gives some indication of his interest in determining a series of pitches with twelve notes.

Plate 5 reproduces Berg's analysis that he annotated onto the score of op. 23, no. 2. In m. 1, above the right-hand melody, Berg numbered each consecutive pitch from 1 to 9 with a blue pencil. At the top of the page, also in a blue pencil, Berg wrote "es, e c fehlt" and numbered these three notes as



Plate 5: Alban Berg's analysis of mm. 1–5 from the second movement of Arnold Schönberg's *Five Piano Pieces*, op. 23 (Österreichische Nationalbibliothek, Wien, Musiksammlung [F21.Berg.169])

"11 10 12" respectively. Compared to Schloß's analytical notes (c = 10, e = 11, and d# = 12), Berg listed a different order for the last three pitches on the score (e = 10, e \flat = 11, and c = 12) and wrote e \flat instead of d#. Perhaps Berg is now focusing on the left and right hands to generate twelve different notes. In m. 2, for example, the E \natural in the left hand is the tenth different note to appear and Berg wrote "10" in a blue pencil below this pitch. The E \flat at the end of m. 2 in the left hand is the eleventh new note in this passage, which Berg labeled as "11," and chromatic completion is achieved in m. 3 with the C \natural in the right hand; Berg wrote "12" above this C \natural . At some point, Berg may have realized that this movement is not constructed with a series of twelve notes since he drew a red line through the numbers 10, 11, and 12 that he entered onto the score. He also crossed out his annotations at the top of the page in red pencil. In m. 1, Berg did not cross out his analysis of the left-hand pitches "9 3 6," but circled each number with a red pencil. Perhaps Berg noticed that the three pitches – C#, A \flat , and A \natural – double the pitches of the right hand. ²⁵

Berg does not analyze the rest of this movement from a twelve-tone perspective, but instead focuses on the different permutations of Schönberg's nine-note melodic line. In the last six measures of the second movement, Berg not only identified every statement of Schönberg's nine-note series by labeling each entry with "Umkehrung," but also numbered all nine pitches with a blue

25 When this nine-note motive reappears in mm. 10 and 14, Berg again labeled the pitches from 1–9 and placed a red circle

around each of the lowest pitches of the left hand. The circled notes seem to suggest that Berg was highlighting pitch doublings. pencil. In m. 19, Berg pointed out that the last two pitches of one nine-note statement (A and F \sharp) also function as the first two pitches of another nine-note statement. Above A and F \sharp Berg wrote "1 2" and below "8 9." He also drew a box in red pencil around this moment in the score, and in the right-hand margin wrote "1 2 = 8 9".

The annotations on staves 2–5 of Schloß's analytical notes (Plate 4) pertain to the first piano piece of op. 23. On staves 4 and 5 Schloß transcribed the first three measures of the movement and included just the outer voices for the fourth measure and only the highest, right-hand pitches in the fifth measure (E and D). On his transcription, Schloß highlighted two-, three-, and four-note motives with brackets in different colored pencils. Schloß also remarked on the relationship among these motives. For instance, he placed an orange bracket below the pitches of the left-hand, B–D–C‡ motive (mm. 2–3) and labeled it as "KU." As Berg pointed out with an arrow, the intervallic structure of this bass motive (+3, -1) is the retrograde inversion ("KU") of the inner voice motive in the first two measures (-1, +3).

In addition to the motivic analysis of mm. 1–3, Schloß entered what appears to be a twelve-tone row count in red pencil, but he did not include 11 and 12 in his counting. On the second staff Schloß wrote a linear ordering of the 10 notes he identified in his transcription, and below each note he included the order numbers from 1 to 10. Following the tenth note, Schloß notated two additional pitches (C# and E), thus generating a series of twelve pitches. Compared to the first ten notes C# and E seem to be written in a lighter shade, suggesting perhaps that Schloß was uncertain about including them in his row. In addition, Schloß did not label the last two pitches as 11 and 12 but simply wrote the letter name below each note, "cis" and "e." If Schloß was thinking about this opening passage from a twelve-tone perspective, it is not clear why he wrote C# before E since the right-hand E on the downbeat of m. 3 is the eleventh new note to appear followed by the C# a beat later. On the right-hand side of the third staff, Schloß wrote out an inverted form ("U") of the "twelve-tone row" that he notated on the second staff. 26

Another document that includes Schloß's analysis of the *Five Piano Pieces*, op. 23 appears among Berg's sketches for *Lulu* (Plate 6).²⁷ Schloß entered his observations on staves 1–3, 5–6, and 8. The analysis of the first movement of op. 23 appears on the top two staves. Schloß wrote the same "twelve-tone row" that was written in his analytical notes. (Refer to Plate 4). Once again, the last two pitches, C‡ and E, appear in a lighter shade of pencil and labeled "*cis*" and "e." A number below each pitch refers to its position within an ascending

²⁶ Schloß's inverted form of his "twelvetone row" does not appear in this movement.

²⁷ Österreichische Nationalbibliothek, Wien, Musiksammlung (F21.Berg.128.XX, fol 4).



Plate 6: Julius Schloß's analytical notes to Arnold Schönberg's Five Piano Pieces, op. 23 (Österreichische Nationalbibliothek, Wien, Musiksammlung [F21.Berg.128, XX, fol. 4])

chromatic scale starting on F# (1). The second note of the row, E♭, is the tenth pitch of an ascending chromatic scale from F#. The third note, D, is the ninth pitch, and so on. On the right-hand side of staves 1 and 2, Schloß wrote out the three- and four-note motives from mm. 1–4 and included brackets in colored pencils. The markings here are especially revealing as to Schloß's thinking. By crossing out his "twelve-tone row" and circling the three- and four-note motives, it seems that Schloß ultimately rejected the notion that this piece is based on a series of twelve pitches and decided that its motivic structure is the key to understanding its organization.²⁸

The analytical sketches on these two pages of manuscript paper reveal that Schloß was not only focusing on the motivic structure of op. 23, no. 1, but it also seems that he was attempting to analyze the work from a twelve-tone perspective. The annotations that Berg entered onto his copy of Schönberg's score tell a slightly different analytical story. As shown in Plate 7, Berg's copy of the first movement from op. 23 contains numerous remarks. At the very top of the score Berg wrote "3–4 Ton Motive" in blue pencil, and I believe this corresponds to the brackets that were entered onto mm. 1–3 in pencil and blue pencil. In m. 3, Berg drew a bracket in blue pencil above the four-note,

28 The rest of the annotations pertain to movements II, III, and V. Schloß wrote out the opening series for each of these movements. On the sixth staff, Schloß transcribed the opening five-note melody

of the third movement, and directly above, on staff five, he provided the left hand's response notated here a perfect fifth higher. Intriguingly, Schloß added a C² (staff 6) and a G² (staff 5) at the end of the series.

The only time these two pitches follow either five-note statement occurs in mm. 27 (C^L) and 29 (G^L). On the eighth staff, Schloß wrote the 8-note melodic idea from m. 5 of the third movement.



Plate 7: Alban Berg's analysis of mm. 1–7 from the first movement of Arnold Schönberg's *Five Piano Pieces*, op. 23 (Österreichische Nationalbibliothek, Wien, Musiksammlung [F21.Berg.169])

inner-voice motive and labeled it "Umkehrung." This remark most likely corresponds to the upper-voice, four-note motive in mm. 1–2, which is also marked with a bracket in blue pencil. Berg's observation is not entirely accurate. The intervallic structure of A-C-B-G# (+3, -1, -3) duplicates the intervallic structure of F#-E-D-F (-3, -1, +3) but in reverse not by inversion.

Above mm. 1–3, this time in orange pencil, Berg remarked that the pitches in the first three measures do not generate a row "(keine Reihe)" but form an 11-note group: "aber | 11 Töne | Gruppe (fehlt cis)".²⁹ To show where this 11-note group is located Berg inserted a line after the E and B on the downbeat of m. 3, but he does not include the D in the bass; the line was drawn in pencil and orange pencil. Curiously Berg observes that C# is the one pitch missing from this group, and this remark is similar to Schönberg's 1949 analysis of his first piece: "The first three measures [of op. 23, no. 1] consists of thirteen notes. Both D and E appear twice, while C# is missing." In addition, Berg identifies a 21-note

²⁹ Both Barkin and Morris discuss the presence of 11 but from a rhythmic perspective. For example, Morris observes that "[...] the piece is made from eleven, 11-beat units [...]", see Robert Morris: Modes of Coherence

and Continuity, see fn. 23, 6. Also see Elaine Barkin: A View of Schoenberg's Op. 23/1, in *Perspectives of New Music* 12 (1973–74), 99–127.

³⁰ Schönberg's musical example of mm. 1-3 ends after the downbeat of m. 3. See Arnold Schoenberg: My Evolution, in *Style and Idea*. Edited by Leonard Stein (London 1975), 90, Example 15.



Plate 8: Alban Berg's analysis of mm. 25–26 from the first movement of Arnold Schönberg's Five Piano Pieces, op. 23 (Österreichische Nationalbibliothek, Wien, Musiksammlung [F21.Berg.169])

melodic line in the right hand of mm. 1–6 and labels it as a motive (" $Motiv \rightarrow 1-21$ ") and not a row.³¹

Above mm. 3 and 4, Berg wrote "vgl. T. 16, 26 u 30" [compare measures 16, 26 and 30]. Berg is pointing out that some of the motives in the opening measures of this piece appear later in the movement. For example, in mm. 16–18, Berg labeled the first seven pitches of his 21-note motive with numbers and remarked that this statement relates to the original melodic line in mm. 1–3 but now distributed among several octaves of the piano: "Beispiel f.[ür] Tonverlegung" [example of note relocation (or transfer)]. In Berg's analysis of m. 26 when the opening returns but registrally and rhythmically varied, shown in Plate 8, he circled a collection of pitches with red pencil and remarked that this forms an "11-note group" but this time with an E missing ("e fehlt"). Berg also numbered the 21-note motive that is now presented as the middle voice, and in the right-hand margin Berg wrote "Motiv." There are thirteen pitches within Berg's circle, but only eleven different pitch classes since two of the notes are doubled: F#/Gb and F. The notes that are doubled are given a blue check mark while most of the other notes that are not doubled are labeled with a red check mark. In m. 30, Berg circled three dyads and two individual notes with a blue pencil and wrote "vgl 3" [compare (to m.) 3]. Berg points out here that the circled pitches in m. 30 are related to the pitches in mm. 3–4.

Berg's analytical markings on his copy of Schönberg's score of the first piano piece of op. 23 seem to indicate his awareness of the difference between a row, presumably a twelve-tone row, and a group of notes. In addition to the terms "row" and "group" that appear in this analysis, Berg refers to the 21-note

Vol. III: Notenbeilage, 65; John Graziano: Serial Procedures in Schoenberg's Op. 23, in Current Musicology 13 (1972), 58–63; Elaine Barkin: A Note on Register in Op. 23/1, in Music Review 34/2 (May 1973), 141–145; and Kathryn Bailey: 'Composing With Tones': A Musical Analysis of Schoenberg's Op. 23 Pieces for Piano (London 2001) (The Royal Music Association Monographs 10).

³¹ Several scholars view the top voice of the right hand in mm. 1–6 as a 21-note melody. See Jan Maegaard: Studien zur Entwicklung des dodekaphonen Satzes bei Arnold Schönberg (Kopenhagen 1972),

melodic line in the upper voice of the right hand as a "motive."³² Although a twelve-tone analysis is only implied ("keine Reihe") the main focus of Berg's remarks and annotations on the score concerns the motivic structure of the first piece.

Questions of dating the analyses

As can be seen in Berg's scores of Schönberg's early twelve-tone works, his attempts to familiarize and understand these compositions were accomplished by analysis. His student, Julius Schloß, followed suit. Although none of the row charts, analytical notes, and annotated scores include dates, there are some clues that may help establish an approximate timeframe. Berg most likely did not possess his own copies of Opera 23 and 24 until December of 1924. Schönberg wrote two Christmas dedications to Berg, one on the cover to op. 23 and another dedication on the Serenade. 33 Both of Schönberg's dedications date from 1924, and if Berg received these two scores as Christmas gifts, he most likely did not start analyzing them until the very end of 1924, at the earliest, or in the first few months of 1925. During the next two years, Berg possibly shared his copies of Schönberg's scores with his student, Schloß, who then added his own analytical observations. I also argue that it was not until 1927 when Schloß constructed the three row charts for Opera 23-25. From 1926 until the end of his life, Schloß was a committed composer of twelve-tone music, and for every twelve-tone work Schloß constructed a row chart. In 1926 when Schloß first began composing twelve-tone works, he modeled his own row charts after Berg's in which the transpositions of the prime and inverted rows chromatically descend. For reasons that are not clear, Schloß suddenly changed the format of his row charts in January 1927 so that the transpositions of the rows chromatically ascend, and he would continue this practice for the rest of his life. I thus believe that the various analyses of Schönberg's early twelve-tone works that are housed in the Alban Berg Nachlass date from the end of 1924 to 1927. Although the exact dates of these materials remain unknown, these analyses provide insights into Berg's initial understanding of Schönberg's early twelvetone compositional method, and importantly they historically constitute perhaps one of the earliest, surviving twelve-tone analyses of Schönberg's works.

Berg, möge diese | Serenade zu einer | Weihnacht=Musik | taugen; diesmal | wenigstens. | Dein | Arnold Schönberg | 1924." [Warmest Christmas wishes, Dear Berg, may this Serenade be good for Christmas=music; this time at least. Yours Arnold Schönberg 1924].

³² On the verso side of the row chart that was constructed for the "Sonett," Schloß transcribed the viola's opening melodic line from the first movement. Above he remarked: "I ca. 20-tönige Reihe?" [I approx. 20-note row?]. Curiously, Schloß wrote the word "Reihe" and not "Motiv."

³³ On the cover to op. 23, Schönberg wrote: "Herzlichste Weihnachtswünsche, | Lieber Berg. Dein | 1924 Arnold Schönberg." [Warmest Christmas wishes, Dear Berg. Yours Arnold Schönberg 1924]. On the second page of the Serenade, Schönberg wrote a more cryptic dedication to Berg: "Herzlichste Weihnachtswünsche, | Lieber